CISCO

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Joint Interoperability Test Command
P.O. Box 12798
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Attn: Capt Duncan
Subject: Cisco 2800 Series ISR router compliance

To whom it may concern,

Cisco Systems, Inc. has reviewed the Department of Defense Internet Protocol Version 6
Generic Test Plan version 3 Appendix F and has used this as the basis for the requirements for
this Letter of Compliance.

The following platforms, as part of the product family identified in the table below, are
compliant to the RFC list that immediately follows the product table.

Product Family	Platforms
Cisco 2800 Series Integrated Services Routers (SEE NOTE 1)	2811, 2821 and 2851

NOTE 1:
*The Cisco 2800 Series Integrated Services Router Platforms 2811, 2821 and 2851 are architecturally equivalent, so
only the 2811 will be tested for these three platforms.*

The listed platforms are compliant to the RFC's below based on IOS version 12.4T.
In the RFC list below, a √ is used to show support for the RFC.

Normal Router (NR) Conformance Checklist

IPv6 Base
√ RFC 1981 Path MTU Discovery for IPv6
√ RFC 2460 Internet Protocol v6 (IPv6) Specification
√ RFC 2461 Neighbor Discovery for IPv6
√ RFC 2462 IPv6 Stateless Address Auto-configuration or RFC 3315 Dynamic Host
Configuration Protocol for IPv6 (DHCPv6) or both.
√ RFC 4007 IPv6 Scoped Address Architecture
√ RFC 4193 Unique Local IPv6 Unicast Addresses
√ RFC 4291 IP Version 6 Addressing Architecture
√ RFC 4443 Internet Control Message Protocol (ICMPv6)

Multicasting
- √ RFC 2710 Multicast Listener Discovery (MLD) for IPv6
- √ RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6

Connection Technologies

(Required support for at least one of the below)
- √ RFC 2464 Transmission of IPv6 Packets over Ethernet Networks
- ❏ RFC 2467 Transmission of IPv6 Packets over FDDI Networks
- √ RFC 2472 IP Version 6 over PPP
- ❏ RFC 3572 IPv6 over MAPOS (Multiple Access Protocol over SONET/SDH)

(Optional additional connection technologies)
- ❏ RFC 2491 IPv6 Over Non-Broadcast Multiple Access (NBMA) Networks
- √ RFC 2492 IPv6 over ATM Networks January 1999
- ❏ RFC 2497 Transmission of IPv6 Packets over ARCnet Networks
- √ RFC 2590 Transmission of IPv6 Packets over Frame Relay Networks Specification
- ❏ RFC 3146 Transmission of IPv6 over IEEE 1394 Networks
- ❏ RFC 4338 Transmission of IPv6, IPv4, and Address Resolution Protocol (ARP) Packets over Fibre Channel

IPSec
- √ RFC 2401 Security Architecture for the Internet Protocol
- √ RFC 2402 IP Authentication Header
- √ RFC 2406 IP Encapsulating Security Payload (ESP)
- √ RFC 2407 The Internet IP Security Domain of Interpretation for ISAKMP
- √ RFC 2408 Internet Security Association and Key Management Protocol
- √ RFC 2409 The Internet Key Exchange (IKE)
- √ RFC 4109 Algorithms for Internet Key Exchange Version 1 (IKEv1)
- √ RFC 4302 IP Authentication Header (AH)
- √ RFC 4305 (ESP and AH) Cryptographic Algorithm Implementation Requirements for Encapsulating Security Payload (ESP) and Authentication Header (AH)
- ❏ *RFC 4306 Internet Key Exchange (IKEv2) Protocol (If device supports IKEv2)*
- ❏ *RFC 4307 Cryptographic Algorithms for Use in the Internet Key Exchange Version 2 (IKEv2) (If device supports IKEv2)*
- √ RFC 4308 Cryptographic Suites for IPsec (Suite VPN-A and partially Suite VPN-B)

Transition Mechanisms
- √ RFC 4213 Transition Mechanisms for IPv6 Host and Routers (Routers MUST support dual stacks and support configured tunnels)
- √ RFC 2784 Generic Routing Encapsulation (GRE)

Common Network Applications
- √ RFC 3315 Dynamic Host Configuration Protocol for IPv6 (DHCPv6)
- √ RFC 3484 Default Address Selection for Internet Protocol Version 6 (IPv6)

Net Management

- √ RFC 3411 An Architecture for Describing Simple Network Management Protocol (SNMP) Management Frameworks
- √ RFC 3412 Message Processing and Dispatching for the Simple Network Management Protocol (SNMP)
- √ RFC 3413 SNMP Applications
- ❏ RFC 4087 IP Tunnel MIB

Mobility *(NOTE: IOS Release 12.4T supports the checked RFC but the 2800 Series ISR is not classified as a mobile router)*
- √ RFC 3775 Mobility Support in IPv6
- ❏ RFC 3776 Using IPsec to Protect Mobile IPv6 Signaling Between Mobile Nodes and Home Agents
- ❏ RFC 3963 Network Mobility (NEMO) Basic Support Protocol

Quality of Service
- √ RFC 2474 Definition of the DiffServ Field in the IPv4 and IPv6 Headers

Interior Routers
- √ RFC 2740 OSPF for IPv6
- √ RFC 4302 IP Authentication Header (AH)
- √ RFC 2473 Generic Packet Tunneling in IPv6 Specification

Exterior Router
- √ RFC 4271 A Border Gateway Protocol 4 (BGP-4)
- √ RFC 1772 Application of the Border Gateway Protocol in the Internet
- √ RFC 2545 Use of BGP-4 Multiprotocol Extensions for IPv6 Inter-Domain Routing
- √ RFC 2858 Multiprotocol Extensions for BGP-4

Sincerely,

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